

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

An Investigation into the Feasibility and Advisability of :
Kentucky-American Water Company's Proposed Solution : Case No. 2001-00117
to its Water Supply Deficit :

Direct Testimony of
Scott J. Rubin

on Behalf of
Office of Attorney General

February 21, 2002

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Scott J. Rubin. My business address is 3 Lost Creek Drive, Selinsgrove, PA
3 17870.

4 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

5 A. I am an independent attorney and consultant. My practice is limited to matters affecting
6 the public utility industry.

7 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

8 A. I have been asked by the Office of Attorney General to respond, as best I can given the
9 very limited amount of time that is available, to the questions posed by the Commission
10 in its Order of January 28, 2002.

11 Q. WHAT ARE YOUR QUALIFICATIONS TO PROVIDE THIS TESTIMONY IN THIS CASE?

12 A. I was employed by the Pennsylvania Office of Consumer Advocate (OCA) from 1983
13 through January 1994 in increasingly responsible positions. Since January 1994, I have
14 been an independent public utility consultant and attorney. I have developed substantial
15 expertise in matters relating to the economic regulation of public utilities. I have
16 published articles, contributed to books, written speeches, and delivered numerous
17 presentations, on both the national and state level, relating to regulatory issues. From
18 1990 until I left the OCA, I was one of two senior attorneys in that Office. Among my
19 other responsibilities in this position, I had a major role in setting the OCA's policy
20 positions on water and electric matters. In addition, I was responsible for supervising the
21 technical staff of that Office. I have testified as an expert witness before utility
22 commissions or courts in the District of Columbia and in the states of Arizona, Delaware,

1 Kentucky, Maine, New Jersey, New York, Ohio, Pennsylvania, and West Virginia. I
2 also have testified as an expert witness before the U.S. House of Representatives Science
3 Committee and the Pennsylvania House of Representatives Consumer Affairs
4 Committee. I also have served as a consultant to several national utility industry trade
5 associations and to state and local governments throughout the country. Appendix A to
6 this testimony is my curriculum vitae.

7 Q. WERE YOU A WITNESS FOR THE OFFICE OF ATTORNEY GENERAL IN ANY PREVIOUS
8 PROCEEDINGS INVOLVING KENTUCKY-AMERICAN WATER COMPANY?

9 A. Yes, I was a witness for the Office of Attorney General in the original source of supply
10 investigation (Case No. 93-434) both in 1994 and again in 1997, and in two Kentucky-
11 American Water Company (KAWC) rate cases (Case No. 95-554 and Case No. 2000-
12 120).

13 Q. HOW IS YOUR TESTIMONY ORGANIZED?

14 A. Each question in the testimony will be a question posed by the Commission in its January
15 28, 2002, Order. The questions will be asked in the same order that they appear in the
16 Order.

17 Q. BEFORE YOU BEGIN ANSWERING THE COMMISSION'S QUESTIONS, DO YOU HAVE ANY
18 GENERAL COMMENTS CONCERNING YOUR TESTIMONY?

19 A. Yes, I do. The amount of time provided by the Commission to respond to its questions is
20 less than one month, which is extremely short for an in-depth inquiry of this nature.
21 Compounding this problem is the discovery schedule, which resulted in my receipt of
22 more than 1,000 pages of documents from KAWC less than a week before the testimony

1 is due. As a result, my testimony will be based primarily on what I can determine from
 2 documents obtained by the Commission Staff and from KAWC; from the Kentucky
 3 Water Resources Research Institute's (KWRRI) study and modeling software, as
 4 provided during Case No. 93-434; and from my earlier testimony and analysis in that
 5 case. There simply has not been time to conduct additional studies, model runs, or
 6 extensive independent research. That is unfortunate because the questions asked by the
 7 Commission are important ones that have the potential to affect the future of the greater
 8 Lexington area for many years to come.

9 Q. WHAT IS THE CURRENT PROJECTED DEMAND OF KENTUCKY-AMERICAN'S CUSTOMERS IN
 10 YEAR 2020?

11 A. The Water Supply Plan issued by the Fayette County Water Supply Planning Council in
 12 July 1999 (Table 6-6 on page 68)¹ provides the following estimates for KAWC's water
 13 demand in the year 2020:

| Measure of Water Demand | Water Demand Projection for Year 2020 (in MGD) | | | |
|---|--|-------------------|---------------------|----------|
| | Avg. Day | May-Oct. Avg. Day | Avg. Day Peak Month | Peak Day |
| Normal year, no conservation | 48 | 53 | 63 | 85 |
| Normal year, KAWC conservation plan | 45 | 50 | 59 | 82 |
| Drought year, no conservation | 58 | 65 | 72 | N/A |
| Drought year, KAWC conservation plan | 54 | 61 | 67 | N/A |
| Drought year, KAWC conservation plan and odd-even watering restrictions | 52 | 58 | 64 | N/A |

¹ This document was provided in electronic form by the Commission Staff. Footnotes will be used to provide a reference to the location of the electronic file. This document can be found in LFUCG\20010628\lfc water supply plan.pdf, page 78.

1 In December 1999, Dr. Lindell Ormsbee from the KWRRI stated that, for planning
2 purposes, it would be appropriate to use the last row shown above; that is the drought
3 year demands assuming KAWC's conservation plan and odd-even watering restrictions.
4 (Summary of Water Supply Alternatives for Fayette County, 12/6/99, page 6).²

5 On April 2, 2001, Linda Bridwell, KAWC's Director of Engineering, stated that
6 KAWC's projected average day demand for 2020 is 48.13 MGD, which appears to be the
7 normal year / no conservation figure from the Water Supply Plan. (Letter from Bridwell
8 to Rebmann, April 2, 2001.)³

9 I would note, however, that there is some question about the validity of KAWC's
10 projections of its peak day demand. In its response to PSC DR #16, KAWC provides a
11 comparison of its demand projections with its actual demand for 1996-2000. The
12 projections of average day demand are very close to actual (generally within 2 MGD, or
13 about 5 percent), but the projections of peak day demand were much less accurate.
14 Specifically, between 1996 and 2000, KAWC's projections of peak day demand were off
15 by anywhere from 7 to 17 MGD, a variance of 10 to 30 percent. It appears, therefore, that
16 KAWC's methodology for projecting peak day demand should be reexamined.

17 With the exception of the peak day demand forecasts, it appears that there is
18 substantial agreement on the set of demand projections for KAWC for the year 2020.
19 There may be a difference of opinion concerning which projection should be used for
20 planning purposes, but once that decision is made, the above table appears to provide a
21 consensus demand estimate.

² Kentucky River Authority\First Request\part 06.pdf, page 6.

³ LFUCG\20010911\submission.pdf, pages 45-47.

1 Q. IN LIGHT OF THE RESULTS OF THE 2000 CENSUS, ARE THE DEMAND PROJECTIONS
 2 CONSIDERED IN CASE NO. 93-434 STILL REASONABLE? IF NOT, WHAT MODIFICATIONS TO
 3 THESE PROJECTIONS ARE REQUIRED?

4 A. Yes, the demand projections from Case No. 93-434 remain reasonable. The results of the
 5 2000 census are remarkably consistent with the population projections for 2000 that were
 6 used in the KWRRI's model. The following table compares the population projections
 7 for each county in the Kentucky River basin with the actual population from the 2000
 8 census. It can be seen that the population forecast relied upon in the KWRRI's modeling
 9 in Case No. 93-434 is incredibly close to the actual population reported by the U.S.
 10 Census Bureau. In Fayette County (KAWC's main service area), the difference is less
 11 than 350 people, while for all counties in the river basin the difference is less than 1,500
 12 people, or less than 0.2%.

| County | Forecast | Actual | Difference | % Difference |
|----------------|-----------------|----------------|-------------------|---------------------|
| Anderson | 19,375 | 19,111 | 264 | 1.38% |
| Boyle | 27,202 | 27,697 | (495) | -1.79% |
| Breathitt | 15,654 | 16,100 | (446) | -2.77% |
| Carroll | 10,372 | 10,155 | 217 | 2.14% |
| Clark | 31,798 | 33,144 | (1,346) | -4.06% |
| Clay | 23,703 | 24,556 | (853) | -3.47% |
| Estill | 16,297 | 15,307 | 990 | 6.47% |
| Fayette | 260,861 | 260,512 | 349 | 0.13% |
| Franklin | 47,494 | 47,687 | (193) | -0.40% |
| Garrard | 13,775 | 14,792 | (1,017) | -6.88% |
| Grant | 20,911 | 22,384 | (1,473) | -6.58% |
| Jessamine | 38,075 | 39,041 | (966) | -2.47% |
| Knott | 19,810 | 17,649 | 2,161 | 12.24% |
| Lee | 8,075 | 7,916 | 159 | 2.01% |
| Leslie | 14,903 | 12,401 | 2,502 | 20.18% |
| Letcher | 28,726 | 25,277 | 3,449 | 13.64% |
| Lincoln | 22,677 | 23,361 | (684) | -2.93% |
| Madison | 67,802 | 70,872 | (3,070) | -4.33% |
| Mercer | 20,951 | 20,817 | 134 | 0.64% |
| Owen | 10,906 | 10,547 | 359 | 3.40% |

| County | Forecast | Actual | Difference | % Difference |
|----------|---------------|---------------|------------|--------------|
| Owsley | 5,624 | 4,858 | 766 | 15.77% |
| Perry | 32,414 | 29,390 | 3,024 | 10.29% |
| Powell | 13,423 | 13,237 | 186 | 1.41% |
| Scott | 29,558 | 33,061 | (3,503) | -10.60% |
| Wolfe | 7,832 | 7,065 | 767 | 10.86% |
| Woodford | <u>23,413</u> | <u>23,208</u> | <u>205</u> | <u>0.88%</u> |
| Total | 831,631 | 830,145 | 1,486 | 0.18% |

Sources:

Forecast is high demand forecast from UK/WRRRI Economics Group, Demand Forecast Model (file: DFM.xls) provided in Case No. 93-434; use of high demand forecast: L. Ormsbee, Kentucky River Basin Water Supply Assessment Study, Executive Summary, p. 6.

Actual is from Census 2000, <http://factfinder.census.gov>

1 Q. HOW DO KENTUCKY-AMERICAN'S BUSINESS DEVELOPMENT PLANNING AND ACTIVITIES
2 AFFECT KENTUCKY-AMERICAN'S PROJECTED DEMANDS?

3 A. KAWC states that its demand forecast does not assume the acquisition of other utilities
4 and that its recent acquisitions have had a negligible impact on its demand forecast.
5 (KAWC response to PSC DR #22). I have not been able to verify the accuracy of this
6 statement, or its continued applicability in the future, because KAWC refused to respond
7 to a data request on this issue.

8 Q. WHAT RESTRICTIONS, IF ANY, SHOULD BE PLACED UPON KENTUCKY-AMERICAN'S
9 BUSINESS ACQUISITIONS TO REDUCE KENTUCKY-AMERICAN'S PROJECTED DEMAND?

10 A. If it appears that KAWC is not taking reasonable actions to ensure that it can provide its
11 customers with a reliable supply of water, then the Commission should consider
12 prohibiting KAWC from adding new customers, whether through expansion or
13 acquisition. Based on the information that I have received thus far, I do not believe that
14 KAWC is currently in this position. As I discuss elsewhere in this testimony, the
15 Kentucky River Authority, the Bluegrass Water Supply Consortium, and other

1 stakeholders appear to be taking reasonable actions to implement a long-term water
2 supply plan for central Kentucky.

3 I also would call attention to a memorandum from Nick Rowe, KAWC's Vice
4 President for Operations, dated March 1, 2001 (KAWC response to PSC DR #5, pages
5 67-68, a copy of which is attached as Appendix B), where this issue is discussed. Mr.
6 Rowe addresses the Division of Water's requirements and KAWC's current and
7 projected ability to meet those requirements (based on average day demand).
8 Specifically, he states:

9 A third issue that I'd like to discuss is that of growth and the services we
10 continue to add to our local system on an annual basis. As noted in the
11 third paragraph of the Division of Water's correspondence, their water
12 main extension sanctions, as well as the tap-on sanctions, are implemented
13 at 85% and 95%, respectively, based on a 12-month average of actual
14 production versus operational design capacity of a plant facility. The good
15 news for us is that our current average day of 41 mgd is 63% of the current
16 design capacity of 65 mgd, or 59% of our current permit capacity of 70
17 mgd. When looking to the future, our projected average day for the year
18 2020 is 45 mgd, which equates to 69% of our current design capacity of
19 65 mgd, or 64% of our permit capacity of 70 mgd.

20 In other words, KAWC does not foresee a problem in serving the average needs
21 of its customers, and it uses this fact to justify the continued addition of customers to its
22 system. What is not addressed, however, is the ability of KAWC to meet the needs of
23 new customers under drought conditions when demands are higher and supplies are
24 stressed. The Commission should consider requiring KAWC to demonstrate its ability to
25 serve new customers during drought conditions, and not just during average conditions as
26 the Division of Water apparently requires.

27 Q. WHAT IS THE EFFECT OF KENTUCKY-AMERICAN'S PRESENT EFFORTS TO ENCOURAGE
28 CONSERVATION ON EXISTING AND PROJECTED CUSTOMER DEMAND?

1 A. The table of demand forecasts for 2020 presented above shows that KAWC’s long-range
2 conservation plan, without watering restrictions, would reduce demand during a drought
3 year by approximately 4 MGD. If odd-even watering restrictions are added, the
4 reduction in demand would be approximately 7 MGD below what it would be with no
5 conservation. According to the Fayette County Water Supply Plan, the conservation
6 activities included in this plan are “fixture retrofits, public education, and increased leak
7 detection.” (page 68, footnote 4)⁴

8 Q. WHAT ADDITIONAL CONSERVATION MEASURES, IF ANY, CAN BE UNDERTAKEN BY
9 KENTUCKY-AMERICAN TO REDUCE EXISTING AND PROJECTED CUSTOMER DEMAND? WHAT
10 IS THE POTENTIAL EFFECT OF THESE MEASURES ON EXISTING AND PROJECTED CUSTOMER
11 DEMAND?

12 A. These are excellent questions, but it would require a study of KAWC and its service area
13 to answer them. Such a study cannot be conducted in the amount of time that the
14 Commission has provided. Additional conservation measures might be used to reduce
15 average day demand, peak demand, or both. From my review of documents provided by
16 KAWC in response to PSC DR #11, it appears that KAWC’s conservation activities to
17 date have focused almost exclusively on consumer education. While consumer education
18 is extremely important, much more could be done, particularly in the areas of plumbing
19 fixture retrofits and replacements, incentives for water-efficient landscaping, trade ally
20 and rebate programs, and rate design changes. In fact, it appears that KAWC’s
21 management is opposed to the type of permanent reductions in water consumption that

⁴ LFUCG\20010628\lfc water supply plan.pdf, page 78.

1 can be achieved through fixture replacements. For example, a handwritten note from
2 KAWC's president states: "Good plan – I assume we're okay with most money going to
3 education (in lieu of conservation hardware e.g. showerheads, etc. – I think we're on right
4 track)." (KAWC response to PSC DR #11, page 944, a copy of which is attached as
5 Appendix C)

6 As I said, there has not been sufficient time to conduct a study concerning the
7 cost-effectiveness or efficacy of these types of programs for KAWC, and it does not
8 appear from the documents provided that KAWC has conducted such a study in recent
9 years. It is not possible, therefore, for me to state a conclusion concerning the costs and
10 benefits of additional conservation measures. It is clear, however, that there is a wide
11 range of conservation initiatives that are not part of KAWC's current conservation plan.

12 In addition, Dr. Ormsbee, in his December 1999 presentation, quotes the
13 following statement: "If the maximum day demand were projected to increase at a rate
14 similar to the average water use projections, the 2020 [treatment] capacity need would be
15 70 MGD. This would require a 5 MGD capacity increase, rather than a 20 MGD
16 increase."⁵ That statement provides one measure of the potential effect of controlling the
17 rate of increase in maximum day demand.

18 Q. WHAT CONSERVATION MEASURES CAN BE IMPOSED BY LOCAL GOVERNMENTAL
19 AUTHORITIES UPON KENTUCKY-AMERICAN'S CUSTOMERS? WHAT IS THE POTENTIAL
20 EFFECT OF THESE MEASURES ON EXISTING AND PROJECTED CUSTOMER DEMAND?

⁵ Kentucky River Authority\First Request\part 06.pdf, page 7.

1 A. This question calls for a legal opinion concerning the powers of local governmental
2 authorities. It may be addressed by counsel in the brief for the Office of Attorney
3 General.

4 Q. WHEN CONSIDERED IN LIGHT OF THEIR POTENTIAL EFFECTS ON THE LOCAL AND REGIONAL
5 ECONOMY AND THE LIFESTYLE OF KENTUCKY-AMERICAN'S CUSTOMERS AND THEIR
6 POTENTIAL EFFECT ON EXISTING AND PROJECTED CUSTOMER DEMAND, WHICH, IF ANY, OF
7 THESE ADDITIONAL CONSERVATION MEASURES ARE REASONABLE?

8 A. This question would be an integral part of a comprehensive conservation study for
9 KAWC. As noted above, such a study cannot be conducted in the amount of time that
10 the Commission has provided.

11 Q. WITHOUT ANY IMPROVEMENTS, HOW MUCH KENTUCKY RIVER SUPPLY CAPACITY IS
12 AVAILABLE TO KENTUCKY-AMERICAN TO MEET PROJECTED CUSTOMER DEMAND?

13 A. Dr. Ormsbee has addressed this point on several occasions since 1997. It does not appear
14 that any of his analyses take into account the possibility of the Division of Water
15 allowing KAWC to waive some of the withdrawal restrictions in its permit during low-
16 flow conditions, such as the Division authorized during 2001 (letter of April 27, 2001,
17 from A. Leon Smothers to Linda C. Bridwell).⁶ To that extent, therefore, his analyses
18 may understate the amount of water available to KAWC.

19 Dr. Ormsbee concluded that unrestricted demands projected for the year 2020
20 could not be met during the drought of record (the 1930 drought). The available supply

⁶ NREPC\first psc inspection.pdf, page 55.

1 of water would fall short by approximately 3 billion gallons.⁷ He also concluded that
2 with “significant demand management (e.g., limiting Lexington withdrawal to 31 MGD)
3 and by mining 8 feet from some pools” there would be enough water from the Kentucky
4 River as it presently exists to serve that reduced level of demand from KAWC.⁸

5 Q. WILL THE CURRENT SUPPLY CAPACITY OF THE KENTUCKY RIVER, WITHOUT ANY
6 IMPROVEMENTS, MEET THE TOTAL REASONABLE REQUIREMENTS OF KENTUCKY-
7 AMERICAN’S CUSTOMERS UNDER MAXIMUM CONSUMPTION IN 2020? IF NOT, WHAT IS THE
8 DIFFERENCE BETWEEN THIS SUPPLY CAPACITY AND THE TOTAL REASONABLE
9 REQUIREMENTS OF KENTUCKY-AMERICAN’S CUSTOMERS UNDER MAXIMUM CONSUMPTION
10 IN 2020?

11 A. As stated in response to the previous question, Dr. Ormsbee has concluded that the
12 Kentucky River without further improvements would fall 3 billion gallons short of
13 meeting KAWC customers’ unrestricted demands in 2020 during the drought of record. I
14 am not aware of any concerns about the ability of the river to meet KAWC customers’
15 demands during non-drought periods. Given the combination of lower customer demand
16 and higher river flows during non-drought years, this should not be a concern. It also is
17 not a particularly important question because the planning criteria for KAWC (or any
18 water supplier) involve looking at the ability of the utility system to meet extreme or
19 stressed conditions.

20 In addition, I do not agree with the Commission’s conclusion that unrestricted
21 demand during a drought constitutes the “reasonable requirements” of customers. In my

⁷ Kentucky River Authority\First Request\part 06.pdf, page 4.

⁸ LFUCG\20010622\document group 2.pdf, page 20

1 experience, and I believe in the experience of KAWC as well, customers understand that
2 droughts mean that they need to be more careful than usual about the way in which water
3 is used. Consumers understand that restrictions on non-essential water uses (daily lawn
4 watering, washing cars, restrictions on automatic sprinklers, etc.) are reasonable, and not
5 unduly burdensome, during a drought. This leads me to conclude that the “reasonable”
6 demands of customers during a serious drought should be no more than the demands
7 shown earlier in this testimony that include the effects of KAWC’s conservation plan and
8 odd-even restrictions. I do not know if any analysis has been done to determine the
9 magnitude of the deficit for KAWC under this demand scenario.

10 Q. IS THE CURRENT SUPPLY CAPACITY OF THE KENTUCKY RIVER, WITHOUT ANY
11 IMPROVEMENTS, SUFFICIENT TO MEET KENTUCKY-AMERICAN’S CURRENT CUSTOMER
12 DEMAND IF A DROUGHT OF RECORD OCCURS?

13 A. I am not aware of any study that has been done recently of the ability of the river, as it
14 currently exists, to meet KAWC’s current customer demand during a drought of record.
15 However, the current situation is similar to one of the scenarios evaluated in KWRRI’s
16 1996 study. Specifically, given the accuracy of the population estimate for 2000 that was
17 used in that study, the scenario for the year 2000 high demand with valves is close to the
18 existing situation. That scenario concluded that there would be a deficit of approximately
19 1 billion gallons during the drought of record. In addition, it was shown that
20 implementing short-term conservation measures and changing the minimum flow
21 restrictions would completely eliminate the deficit under that scenario.⁹

⁹ KWRRI, Task V Report, pages 19-20.

1 It appears that this combination of the 2000 high demand projection, valves, a
2 modified withdrawal permit, and the possibility of implementing short-term conservation
3 measures reasonably represents the current situation for KAWC. This would mean that
4 the river, with no further enhancements, is adequate to meet KAWC's reasonable
5 customer demands at the present time, even during the drought of record.

6 Q. IS THE CURRENT SUPPLY CAPACITY OF THE KENTUCKY RIVER, WITHOUT ANY
7 IMPROVEMENTS, SUFFICIENT TO MEET KENTUCKY-AMERICAN'S CURRENT CUSTOMER
8 DEMAND IF A 100-YEAR DROUGHT OCCURS?

9 A. Yes, KWRRI estimated that the 1930 drought was more severe than the 100-year
10 drought.¹⁰ So if the river can meet KAWC's current demands under the 1930 drought,
11 then it can meet those demands under the less-severe 100-year drought.

12 Q. IS THE CURRENT SUPPLY CAPACITY OF THE KENTUCKY RIVER, WITHOUT ANY
13 IMPROVEMENTS, SUFFICIENT TO MEET KENTUCKY-AMERICAN'S CUSTOMER DEMAND IN
14 2020 IF A DROUGHT OF RECORD OCCURS?

15 A. No, as I discussed above, something must be done between now and 2020 to bring supply
16 and demand into balance. This can include augmenting the supply of water on the river
17 (which the Kentucky River Authority is planning to do), reducing the growth in water
18 demand by KAWC's customers (which should be done), or a combination of the two. If
19 nothing is done between now and 2020, and if the population in the Lexington area

¹⁰ KWRRI, Executive Summary, page 5 ("the 1930 drought represents the drought of record with a return interval in excess of 100 years.").

1 continues to grow, then the river will not be able to meet the needs of KAWC's
2 customers under drought-of-record conditions.

3 Q. IS THE CURRENT SUPPLY CAPACITY OF THE KENTUCKY RIVER, WITHOUT ANY
4 IMPROVEMENTS, SUFFICIENT TO MEET KENTUCKY-AMERICAN'S CUSTOMER DEMAND IN
5 2020 IF A 100-YEAR DROUGHT OCCURS?

6 A. No, as I discussed in my previous answer.

7 Q. WHAT MEASURES ARE NECESSARY TO ENABLE THE KENTUCKY RIVER TO PROVIDE
8 KENTUCKY-AMERICAN WITH A SUPPLY ADEQUATE TO MEET PROJECTED CUSTOMER
9 DEMAND IN 2020?

10 A. The Kentucky River Authority (KRA) has been studying the various options that are
11 available to bring supply and demand into balance. The Executive Director of the KRA
12 has stated, in no uncertain terms, that "the Kentucky River Authority will pursue its
13 efforts to address the design drought deficit irrespective of the above problems. The
14 design drought to which these efforts are aimed is the 1930 drought in the year 2020.
15 Most accounts of the deficits in the Lexington area will be 3 to 4 billion gallons during
16 the drought period."¹¹ The KRA has developed a short-term (six-year) plan and a long-
17 term (20-year) plan that it believes will enable the river to meet the water supply needs of
18 the entire river basin. An outline of the plans is attached to a letter from Mr. Reeder to
19 the Lexington-Fayette Urban County Government.¹²

¹¹ Letter from Stephen Reeder to Vice-Mayor Isabel Yates, Dec. 2, 1999. LFUCG\20010622\document group 2.pdf, pages 3-6.

¹² Letter from Stephen Reeder to Paul Schoninger, Nov. 26, 2001. LFUCG\20011211\submission.pdf, pages 3-7.

1 In addition, the Bluegrass Water Supply Consortium is studying regional water
2 supply options. I understand that the consortium has hired a consultant and that this
3 study is currently in progress. It is premature, therefore, to speculate about the role that
4 the Kentucky River or other sources of water might play in a regional water supply plan
5 for central Kentucky.

6 Q. WHAT REGULATORY APPROVALS ARE REQUIRED BEFORE IMPLEMENTATION OF THE
7 MEASURES NECESSARY TO ENABLE THE KENTUCKY RIVER TO PROVIDE KENTUCKY-
8 AMERICAN WITH A SUPPLY ADEQUATE TO MEET PROJECTED CUSTOMER DEMAND IN 2020?

9 A. This question calls for a legal opinion concerning regulatory requirements. It may be
10 addressed by counsel in the brief for the Office of Attorney General.

11 Q. WHAT IS THE PROJECTED DEMAND IN 2020 OF OTHER REGIONAL WATER SUPPLIERS AND
12 OTHERS WHO WITHDRAW WATER FROM THE KENTUCKY RIVER? HOW DOES THAT
13 PROJECTED DEMAND AFFECT THE MEASURES NECESSARY TO ENABLE THE KENTUCKY RIVER
14 TO PROVIDE KENTUCKY-AMERICAN WITH A SUPPLY ADEQUATE TO MEET PROJECTED
15 CUSTOMER DEMAND IN 2020?

16 A. The projected demand of other regional water suppliers and others who withdraw water
17 from the Kentucky River has been considered by the KRA in developing its plans for the
18 river. In 1996, demands for all significant water uses in the river basin were included in
19 the KWRRRI's model in Case No. 93-434. I do not know if those demand projections
20 have been modified by KWRRRI since 1996. I also understand that the Bluegrass Water
21 Supply Consortium has collected demand forecasts from its members and that its
22 consultants will be evaluating that information.

1 Q. HOW MUCH TIME SHOULD BE ALLOTTED TO PLAN, OBTAIN THE REGULATORY APPROVALS,
2 AND CONSTRUCT EACH OF THE NECESSARY IMPROVEMENTS TO ENABLE THE KENTUCKY
3 RIVER TO PROVIDE KENTUCKY-AMERICAN WITH A SUPPLY ADEQUATE TO MEET PROJECTED
4 CUSTOMER DEMAND IN 2020?

5 A. The KRA has considered the reasonable amount of time it should take for planning,
6 engineering, governmental approvals, and construction for each of the items in its short-
7 and long-range plans. If the KRA continues to act responsibly to meet the water supply
8 needs of the Kentucky River basin, and there is no reason to believe that it will not do so,
9 then there is no need for the Commission to “allot” time to any particular element of the
10 KRA’s plan. In addition, the consortium’s regional water supply study should be allowed
11 to progress before any long-term water supply decisions are made for KAWC.

12 Q. WHICH GOVERNMENTAL OR PRIVATE ENTITIES HAVE THE AUTHORITY AND RESPONSIBILITY
13 FOR IMPLEMENTING THE MEASURES NECESSARY TO ENABLE THE KENTUCKY RIVER TO
14 PROVIDE KENTUCKY-AMERICAN WITH A SUPPLY ADEQUATE TO MEET PROJECTED
15 CUSTOMER DEMAND IN 2020?

16 A. This question calls for a legal opinion concerning the powers of other entities. It may be
17 addressed by counsel in the brief for the Office of Attorney General.

18 Q. WHAT IS KENTUCKY-AMERICAN’S ROLE IN ENSURING THE PERFORMANCE OF THE
19 MEASURES NECESSARY TO ENABLE THE KENTUCKY RIVER TO PROVIDE KENTUCKY-
20 AMERICAN WITH A SUPPLY ADEQUATE TO MEET ITS PROJECTED CUSTOMER DEMAND IN
21 2020? WHAT IS ITS LEGAL AUTHORITY TO COMPEL PERFORMANCE OF THESE MEASURES?

22 A. KAWC should continue to assist KRA with planning and implementing improvements on
23 the river, and KAWC should remain an active participant in the Bluegrass Water Supply

1 Consortium. It appears that KAWC has been actively participating in those activities and
2 it should continue to do so. In addition, of course, KAWC must continue to pay any fees
3 levied on water withdrawers by the KRA. Beyond its activities with the KRA and the
4 consortium, KAWC must ensure that it has the facilities to adequately treat, store, and
5 distribute the water for its customers. The second question, concerning the legal
6 authority of KAWC, calls for a legal opinion concerning the legal rights and obligations
7 of KAWC and the KRA. It may be addressed by counsel in the brief for the Office of
8 Attorney General.

9 Q. WHAT IS LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT'S ROLE IN ENSURING THE
10 PERFORMANCE OF THE MEASURES NECESSARY TO ENABLE THE KENTUCKY RIVER TO
11 PROVIDE KENTUCKY-AMERICAN WITH A SUPPLY ADEQUATE TO MEET ITS PROJECTED
12 CUSTOMER DEMAND IN 2020?

13 A. This question calls for a legal opinion concerning the powers of a local governmental
14 authority. It may be addressed by counsel in the brief for the Office of Attorney General.

15 Q. WHAT IS THE ROLE OF THE KENTUCKY NATURAL RESOURCES AND ENVIRONMENTAL
16 PROTECTION CABINET IN ENSURING THE PERFORMANCE OF THE MEASURES NECESSARY TO
17 ENABLE THE KENTUCKY RIVER TO PROVIDE KENTUCKY-AMERICAN WITH A SUPPLY
18 ADEQUATE TO MEET ITS PROJECTED CUSTOMER DEMAND IN 2020?

19 A. This question calls for a legal opinion concerning the powers of another state agency. It
20 may be addressed by counsel in the brief for the Office of Attorney General.

21 Q. WHAT IS THE ROLE OF THE KENTUCKY RIVER AUTHORITY IN ENSURING THE PERFORMANCE
22 OF THE MEASURES NECESSARY TO ENABLE THE KENTUCKY RIVER TO PROVIDE KENTUCKY-

1 AMERICAN WITH A SUPPLY ADEQUATE TO MEET ITS PROJECTED CUSTOMER DEMAND IN
2 2020?

3 A. This question calls for a legal opinion concerning the powers of another state agency. It
4 may be addressed by counsel in the brief for the Office of Attorney General.

5 Q. WHAT IS THE ROLE OF THE U.S. ARMY CORPS OF ENGINEERS IN ENSURING THE
6 PERFORMANCE OF THE MEASURES NECESSARY TO ENABLE THE KENTUCKY RIVER TO
7 PROVIDE KENTUCKY-AMERICAN WITH A SUPPLY ADEQUATE TO MEET ITS PROJECTED
8 CUSTOMER DEMAND IN 2020?

9 A. This question calls for a legal opinion concerning the powers of the federal government.
10 It may be addressed by counsel in the brief for the Office of Attorney General.

11 Q. WHAT IS THE ROLE OF OTHER REGIONAL WATER SUPPLIERS IN ENSURING THE
12 PERFORMANCE OF THE MEASURES NECESSARY TO ENABLE THE KENTUCKY RIVER TO
13 PROVIDE KENTUCKY-AMERICAN WITH A SUPPLY ADEQUATE TO MEET ITS PROJECTED
14 CUSTOMER DEMAND IN 2020?

15 A. This question calls for a legal opinion concerning the powers of various public and
16 private water suppliers. It may be addressed by counsel in the brief for the Office of
17 Attorney General.

18 Q. WHAT IS THE EXPECTED COST OF THE MEASURES NECESSARY TO ENABLE THE KENTUCKY
19 RIVER TO PROVIDE KENTUCKY-AMERICAN WITH A SUPPLY ADEQUATE TO MEET PROJECTED
20 CUSTOMER DEMAND IN 2020? HOW WILL THESE COSTS BE FINANCED? IF GOVERNMENT
21 FINANCING WILL BE USED, WHAT IS THE LIKELIHOOD OF OBTAINING THIS FINANCING, AND
22 WHAT IS THE TIME PERIOD NEEDED TO SECURE SUCH FINANCING?

1 A. I am not aware that the KRA has developed a complete cost estimate and financing plan
2 for its short- and long-term plans. I would expect financing for the KRA's plans to come
3 from a variety of governmental sources, including the issuance of debt by KRA. As I
4 understand it, the costs of servicing any debt issued by KRA will be borne by KAWC and
5 others who utilize the river's resources.

6 Q. WHAT ARE KENTUCKY-AMERICAN'S PLANS FOR IMPLEMENTING THE MEASURES
7 NECESSARY TO ENABLE THE KENTUCKY RIVER TO PROVIDE KENTUCKY-AMERICAN WITH A
8 SUPPLY ADEQUATE TO MEET ITS PROJECTED CUSTOMER DEMAND IN 2020?

9 A. This information must be provided by KAWC.

10 Q. WHAT ACTIONS HAS KENTUCKY-AMERICAN TAKEN, AS OF JANUARY 1, 2002, TO
11 IMPLEMENT THE MEASURES NECESSARY TO ENABLE THE KENTUCKY RIVER TO PROVIDE
12 KENTUCKY-AMERICAN WITH A SUPPLY ADEQUATE TO MEET PROJECTED CUSTOMER
13 DEMAND IN 2020?

14 A. This information must be provided by KAWC.

15 Q. WHAT REVISIONS TO ITS CURRENT WATER-WITHDRAWAL PERMIT NEED TO BE MADE TO
16 ALLOW KENTUCKY-AMERICAN TO WITHDRAW ADEQUATE WATER FROM THE KENTUCKY
17 RIVER TO MEET ITS PROJECTED CUSTOMER DEMAND IN 2020? WILL THE KENTUCKY
18 NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET LIKELY APPROVE
19 SUCH REVISIONS?

20 A. From the documents provided to the Commission Staff, it is apparent that KAWC and
21 others continue to work with the Division of Water to ensure that KAWC can withdraw
22 sufficient quantities of water without jeopardizing the natural environment. As the KRA

1 makes improvements on the river, I assume that additional studies would be conducted to
2 demonstrate the amount of water that can be withdrawn without jeopardizing the natural
3 environment. I assume that each state agency will do its job and properly exercise its
4 authority, which means that the Natural Resources and Environmental Protection Cabinet
5 will review the information presented to it, exercise its legal authority, and make the
6 decision that it believes is consistent with its responsibilities and the facts.

7 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

8 A. Yes, it does.